CELGAR EXPANSION REVIEW PANEL

INTERIM REPORT

Submitted under the

Federal Environmental Assessment and Review Process

and

British Columbia Major Projects Review Process

Mrs. Jill Bodkin, Chairman
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BRITISH COLUMBIA
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I. PURPOSE

The Celgar Expansion Review Panel has the honour of submitting this interim report to the federal Minister of the Environment, the federal Minister of Fisheries and Oceans and the British Columbia Minister of Environment, in accordance with the Panel's terms of reference. The purpose of this interim report is to inform ministers and the public of the review process to date, and to remove the uncertainty surrounding the proposal which, for some time, has faced the communities that would be affected by its rejection or acceptance.

This report presents our conclusions regarding the overall acceptability of the project. Figure 1 (Page 2) shows the geographic setting of the project. The detailed analysis of the issues and the complete reasons for our recommendations, along with proposed terms and conditions, will be presented in the final report.

II. PROJECT UNDER REVIEW

Celgar Pulp Company is proposing to expand and modernize its bleached kraft pulp mill on the Columbia River, at Castlegar, B.C. The company operates as a joint venture between CITIC, B.C. Inc. and Power Consolidated (China) Pulp Inc.

The proposal is for an increase in production to 1,200 air dried tonnes per day from the current 560 air dried tonnes per day, involving an investment of over 600 million dollars. The company proposes to introduce best available environmental control technology which will reduce discharges of most of the harmful substances into the air and water from current levels, on an absolute basis. The company has stated that all of its wood fibre requirements can be met through purchase of surplus wood chips from sawmills and from pulp logs not now used in the area. It is proposed to transport wood chips by truck from much of the southeast region of the province and northern Washington state.

The existing mill, built some thirty years ago, operates on a variance order which permits discharges beyond government standards.

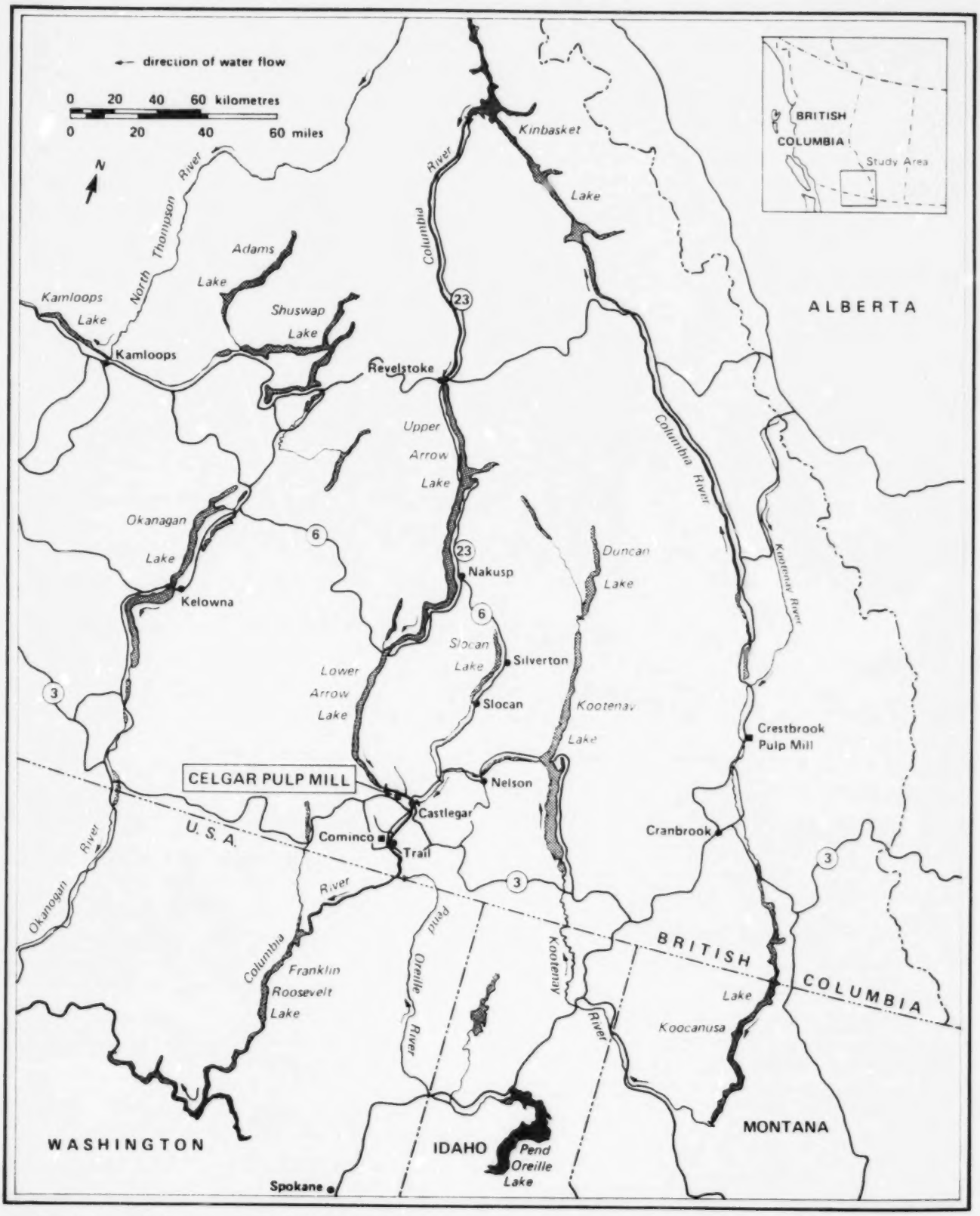

FIGURE 1: GEOGRAPHIC SETTING OF THE CELGAR PULP MILL PROJECT IN KOOTENAY REGION

III. MANDATE OF THE PANEL

The Celgar Expansion Review Panel was appointed under the federal Environmental Assessment and Review Process and the British Columbia Major Projects Review Process.

The mandate of the Panel is to conduct an independent public review of the environmental and associated social effects of the proposed Celgar pulp mill expansion project, including any effects that are external to Canadian territory. The terms of reference focus the Panel's review on the protection of ambient air and water quality, including fish and fish habitat; on the availability of surplus wood chip supply; and on the impact of additional truck traffic necessary to transport wood chips to the mill.

The impact of the project on the management of provincial Crown forests is excluded from the mandate of the Panel.

The Panel is directed to conclude whether or not the proposal is acceptable and to explain the basis for that conclusion. If the proposal is acceptable, the Panel is to recommend terms and conditions under which the pulp mill expansion could proceed.

The Panel's report is to be submitted to the provincial Minister of Environment, the federal Minister of the Environment and the federal Minister of Fisheries and Oceans, the initiating agency. Following review of the Panel's report by the two governments, the report and governments' decisions on the project will be made public.

The Panel was given the option to prepare a short interim report soon after completion of the hearings, with recommendations on whether or not approval in principle for the project should be granted.

IV. PROCESS

Celgar filed an environmental impact assessment report as a Prospectus with the provincial government's Major Projects Steering Committee in December of 1989. Following distribution of the report, 341 public responses and 28 government agency comments were received.

Those views led the province, under the Major Projects Review Process, and the federal government, under the Environmental Assessment and Review Process, to appoint our Panel early this summer with the purpose of holding public hearings and making recommendations to both governments.

Celgar released, in July 1990, their Stage II report in response to the issues that participants and governments had raised during the Prospectus review.

Our Panel raised further questions with the company and with governments, and received responses. Technical consultants engaged by the Panel reviewed the company's proposal and met with interest groups to assist them in their review of the proposal. The views of these consultants were their own, and were not necessarily shared by the Panel.

Community hearings were held September 20 to 26 in Castlegar, Nelson, Slocan, Silverton, Nakusp and Trail. There were 180 participants who made presentations.

Technical hearings focused on scientific aspects of the proposal in eight days of hearings between October 18 and November 1. There were 62 presentations made to the Panel.

All of this material submitted to the Panel, and other relevant documentation form part of the public file.

The issues before the Panel are complex. Following receipt of final submissions, the Panel has reviewed all material received, as a basis for our conclusions.

V. HEARINGS

The impressive range of participation was evidence of the importance attached to the Celgar expansion proposal by those it affected. We advised participants that the Panel's process was neither a referendum, nor a political town hall meeting, nor a test of ideological conviction. Rather, this Panel's review was a serious inquiry into the probable consequences of the proposed expansion of the Celgar mill on this particular area of the Kootenay region. The process seems to have inspired the best that participants had to offer, in part by our warning that we would refuse to accept anything less than courteous responses. We assured them that their views would receive our careful attention and interest.

Participants responded by offering the information we needed, presented seriously, in view of the profound consequences of the proposal, no matter what their interests. In spite of the feelings of acrimony and bitterness before the beginning of the Panel's process, participants listened to each other and resisted extremes of shrillness. Everyone continued throughout our process to learn. Interested parties stretched themselves to draw on the best of resources available, to inform themselves and the Panel.

The hearings on pulp mill process and its effects on water and air quality, more than any other subject, were marked by the quality of scientific inquiry and challenge. We were honoured, fascinated and at times troubled by the representations from those at the leading edge of scientific knowledge. They contributed the results of their research, not always conclusive, but always important, to this Panel's understanding of the risks to life and health associated with this particular mill, on this particular river, in this particular valley. And we heard their views as to ways in which those risks might be reduced.

They argued that the Panel must make judgements on the comprehensive environmental consequences of development in the region. We shared their view that we must indeed examine the incremental effect of this project against a knowledgeable, comprehensive backdrop.

Participants recognized that one of the demands for wisdom on our part is the arbitration of acceptable community standards for environmental, social and economic impact in light of changing standards in law and evolving science.

Most impressive of all was the spirit of working together which developed among those who care about the quality of life and the livelihood of residents of the communities affected despite their diverse interests. Participants gave the Panel confidence that the company and the communities of the west Kootenay region will all continue to thrive according to their values.

It will take great tolerance to reconcile those values. There is passion behind the desire for the project on the part of those communities and businesses whose prosperity depends on Celgar's economic health, and their fear that Celgar's inability to meet environmental standards could lead to closure of the mill. Equally passionate is the commitment of those who have chosen a rural way of life and want to preserve the remote, natural beauty of the Slocan valley. Some found industrial development with any degree of environmental impact unacceptable. Others insisted on particular conditions which would make the project acceptable.

VI. SUMMARY OF REPRESENTATION

A. Air and Water Quality

Celgar's mill is built to an outdated standard and allowed to pollute under a variance order at a level which the public today finds unacceptable. All participants, whether for or against the expansion, agreed that it is important to reduce the current discharges from the mill.

It is noteworthy that all permitting authorities accepted Celgar's proposed control technology, and commitment to move to complete chlorine substitution as soon as proven feasible in mill-scale tests. Given the demonstrable risks from chlorinated organics to that life which depends on the river, all participants agreed on the importance of the reduction or elimination of these contaminants.

With regard to air quality, some uncertainty was revealed as to the consequences of emissions of certain substances, due to a lack of basic information about the actual effects of the topography and climate on the fate of those substances. Again, all participants appreciated that the pulp mill odour will be dramatically reduced.

Participants focused the Panel's attention on the particular features of the Columbia River, its valley and tributaries, as they argued that the standard applied should be site specific. Until the attention prompted by recent proposals, and notably Celgar's, there has been little research on the actual quality of the receiving air and water, their sensitivity to pollutants and the requirements of the natural life in the region.

The Panel heard of the commitment among B.C. Hydro, Cominco, Celgar and the provincial government to integrate research and monitoring of the river. The Canadian federal government, Washington state and United States federal governments also expressed an interest in participation.

Participants noted that there is a long history of international cooperation regarding the Columbia River, which could form the basis for a Canada-United States commitment to environmental protection for this mighty river, unbounded by borders.

B. Availability of Wood Chip Supply

Celgar's proposed fibre supply includes wood chips from sawmills and a small proportion derived from pulp logs. The opportunity to sell increased quantities of surplus wood chips and pulp logs from sawmill and logging operations in the area was welcomed. Participants argued the benefit of increased wood utilization and local economic activity over current waste or export of wood fibre.

A range of values underlies predictions about the need for additional harvesting to support Celgar's fibre needs. Some predicted increases in availability of surplus fibre through improved forest utilization and silvicultural practices. Others predicted that only reductions in harvest levels and dramatic reform of

current forest management practices will ensure sustainability of the forests in the region. Participants expressed a concern for the environmental consequences of the harvesting which might be necessary to provide Celgar with required wood fibre.

Participants spoke extensively on the issues of forest management which many considered relevant to the terms of reference. Where the Panel considers those views beyond our mandate, but nevertheless important, we will be passing those views on to the appropriate authorities. We believe it is essential that those in a position to decide on matters which could affect availability of fibre to Celgar have the benefit of our judgement regarding the environmental consequences of their decisions.

C. Transportation

Participants recognized that the company's proposal to truck additional wood chips will add to the traffic on feeder highways. The greatest increase will be on Highway 3 and the Highway 6 and 23 route. An issue of major concern before our review was the burden of traffic on the latter route, and the desire to protect the Slocan valley from this impact. Information was given to demonstrate that the road is worn out, and unsuited to the conflicting demands among industrial, tourist and local traffic. Particular fears were expressed about safety.

The company had been requested in the Stage II report to evaluate alternatives, including rail and barge transportation of wood chips. In the hearings, the Panel was also informed of preliminary consideration of alternative industrial roads which could divert traffic from the Slocan valley. It is around the issue of increased truck transportation through the Slocan valley that the clash of values is most difficult to reconcile.

VII. PANEL'S CONCLUSIONS

The Panel evaluated the major issues which bear upon the overall environmental and social acceptability of the project. This included consideration of the opportunity to avoid, mitigate or manage adverse impacts of the project, and

the acceptability of unavoidable impacts, risks or uncertainties associated with the project.

A. Air and Water Quality

Information before the Panel confirms that the proposed Celgar mill will meet the minimum environmental requirements of the federal and British Columbia governments which are likely to be in effect when the project is completed. The Panel considers that environmental requirements should also take account of particular site and project specific circumstances. These include the special drainage configuration and valley basin topography which exists at Castlegar. Further, the Panel accepts the representation that the anticipated performance of the proposed best available control technology is achievable.

The Panel believes that achievement of the predicted levels of discharges at Celgar's location on the Columbia River into the ambient air and water will not result in unacceptable environmental damage. Most of these discharges will represent a considerable improvement over Celgar's present contribution to pollution levels. Additional process control improvements could further reduce discharges in the future. Although limited research has been focused on the particular receiving environment, scientific information indicated measures which could mitigate further harm and, over the long term, improve present environmental conditions. Accordingly, our conclusion is that the proposal is acceptable against both published government requirements, and site and project specific environmental considerations.

However, strict terms and conditions for environmental control must be applied. Although Celgar has demonstrated a substantial future commitment, the past performance of its admittedly outdated mill gives little comfort to segments of the community. Achievement of acceptable conditions for the environment, for the people who live in the surrounding communities, and for those who work in the mill, will require that the company assume genuine responsibility for minimizing adverse consequences of its operation. We were impressed by the dedication of residents, workers and other industrial users of the Columbia River, to cooperate with Celgar on environmental improvement. The Panel expects individual and organizational demonstration of Celgar's commitment to monitoring and problem solving. The

expectation of environmental protection must permeate policies and practices of the company, its owners, management and all staff, whose activities could affect pollution from the mill.

B. Availability of Wood Chip Supply

Inventory data considered in separate studies by Celgar, the Ministry of Forests and several forest industry consultants, indicate that there is a substantial surplus of fibre supply for the purposes of pulp mill expansion.

The Panel concludes that residual chip supplies are sufficient to supply Celgar's requirements, provided that average levels of sawmill production are maintained. As a supplement, and in the event of a shortfall, available pulpwood within current tenures should be adequate to provide a secure source of wood chip supply. However, we will be passing on to appropriate authorities information received and our views regarding the environmental impact of any harvesting which may be required.

C. Transportation

The proposed truck transportation would cause a considerable increase in large truck volumes and a small increase in the total highway traffic volumes in the region. These effects are particularly significant on some of the proposed routes. The route of greatest impact is Highways 6 and 23 through the Slocan valley.

The current state of road conditions on Highways 6 and 23 presents traffic safety concerns at various locations. This route has particular problems which need to be resolved as a condition of project approval.

Transportation aspects of the proposal are only acceptable to the Panel with substantial measures to manage traffic on Highways 6 and 23, and with the provincial government's commitment to the bridge and highway improvements proposed in the Ministry of Transportation and Highways' submission.

VIII. RECOMMENDATION

On the above basis, the Panel finds Celgar's proposal acceptable. We recommend that the federal and British Columbia governments grant approval in principle.

However, any interested parties who choose to act on the basis of this recommendation or subsequent decisions of governments should proceed with caution. They should be advised that the Panel's final report will recommend that strict terms and conditions be imposed by permitting authorities.

IX. FINAL REPORT

Although it is beyond the scope of this interim report to detail the Panel's recommendations, we indicate below certain issues which will be subject to recommendations for terms and conditions or comments to approving authorities in the final report. The issues identified here are limited to those where the Panel anticipates that this information may be of importance to those who will be taking action in the period before our final report is available.

A. Air and Water Quality

Pulp mill process and site design should include the capability to adopt various measures to further reduce effluents and emissions. Of particular importance will be measures to allow for the adoption of elemental chlorine free processes; expansion of effluent treatment to provide for tertiary treatment or anaerobic removal of chlorate; alternative means of disposal of total reduced sulphur; prevention of groundwater contamination; and avoidance of adverse effects of log handling. Since the potential for additional nutrient loading from the construction camp and the new mill process has possible adverse consequences, the Panel will be making recommendations regarding prediction and management of adverse effects of nutrients discharged into the river.

The final report will make recommendations regarding the period between now and full operation of the new mill processes. Construction and initial

operational phases are critical, and special precautions will be necessary to minimize the environmental and safety risks of unpredicted events. Measures will also be needed to minimize further adverse effects of discharges from the existing mill over the several years it will continue to operate.

Vigilance will need to underpin environmental quality control. Anyone responsible for planning should anticipate recommended terms and conditions related to process monitoring, environmental staff, laboratory facilities, and assessment of biological effects.

Much remains to be discovered about the qualities of receiving air and water, and how life will be affected by the mill. This information will be essential to managing adverse consequences. Those designing monitoring requirements should focus their attention on gathering information which will have a high probability of detecting changes which, in turn, would require abatement. The Panel's final report will include recommendations related to both government scientific research agendas and ongoing monitoring which the company's permit should require.

B. Availability of Wood Chip Supply - Further Considerations

There is before the Ministry of Forests an application from Celgar Pulp Company for rights to harvest pulpwood. The Forest Resources Commission is also conducting a wide ranging review. The Panel will be passing on to appropriate authorities our proposed means to mitigate the environmental impact of any harvesting which may be required to support the availability of wood chip supply for Celgar. Particular issues include high elevation forests, community watersheds, fish and wildlife habitat, soil quality and recreational and aesthetic use of the forest.

C. Transportation - Further Considerations

Given that the Panel's conclusion is that the transportation aspects of the proposal are acceptable only subject to traffic safety and highway improvements, the Panel suggests that the responsible governmental authorities, as well as the company, could consider the feasibility of potential transportation alternatives. For example, the Panel heard representations about possible barge, rail and private road

alternatives to accommodate industrial traffic which could otherwise jeopardize community planning in the Slocan valley. These alternatives appear so far to have been examined only on the basis of private costs to Celgar, with Celgar's conclusion only slightly more favourable to highway transport. Such a study, which could also involve the community, could analyze costs and benefits of alternatives which might offer the opportunity to avoid truck traffic impacts and provide a basis for comprehensive transportation planning in the region.

X. APPRECIATION

As Ministers and the public review this interim report, the Celgar Expansion Review Panel urge you to recognize the extraordinary contribution of all participants. They offered us the most advanced of scientific research and the benefits of local knowledge. The many participants who cared about the outcome enriched our understanding of their deepest aspirations for their heritage. Thankfully, we enjoyed a frequent spirit of wonderful humour. The Panel hopes you, the Ministers, and the public join in thanking all of those who have contributed so far to our work on your behalf.

CELGAR EXPANSION
REVIEW PANEL

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December 3, 1990

Hon. John Reynolds
Minister of Environment
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Victoria, B.C.
V8V 1X4

Dear Mr. Reynolds,

The Celgar Expansion Review Panel has the honour to submit an interim report, under the federal Environmental Assessment and Review Process and the British Columbia Major Projects Review Process, and in accordance with our terms of reference.

We urge you and the other Ministers involved to simultaneously release this report to the public as soon as possible.

Jill Bodkin
Mrs. Jill Bodkin
Chairman

T Northcote
Dr. Thomas Northcote
Member

Paul R. Thomas
Dr. Paul Thomas
Member